

LISTING OF CLAIMS

No amendments to the claims are submitted with this paper. The following listing of claims is presented solely for the Examiner's convenience:

1. (Previously Presented) A surgical needle, which comprises:
an elongated needle body defining a longitudinal y axis and x and z axes transverse to the y axis, the elongated needle body including a central shaft and having a first end for attachment to a suture and a second needle end for penetrating tissue, the second needle end including lower and upper opposed surfaces and single side surfaces extending continuously between the lower and upper surfaces and contiguous therewith, the upper surface and side surfaces intersecting to define opposed first and second side cutting edges extending to a pointed tip, the lower surface extending to a third cutting edge defined at the intersection of the side surfaces, the third cutting edge extending in oblique relation relative to the longitudinal axis of the needle body and terminating at the pointed tip, the second needle end having a transition area, a proximal portion of the second needle end disposed proximally of the transition area including a first length having a trapezoidal transverse cross-section and a distal portion of the second needle end disposed distally of the transition area including a second length having a triangular transverse cross-section, the first length being longer than the second length, at least a portion of the first length having a diameter that decreases distally towards the second needle end, and at least a portion of the first length having a diameter that decreases proximally towards the central shaft of the needle body.

2. (Previously presented) The surgical needle according to claim 1 wherein the upper and lower surfaces are substantially planar.

3 – 4. (Canceled)

5. (Previously Presented) The surgical needle according to claim 1 wherein the substantially trapezoidal cross-sectional dimension defines a dimension along the z-axes corresponding to a first width of the second needle end, the first width at least equal to a corresponding shaft width of the central shaft.

6. (Previously presented) The surgical needle according to claim 5 wherein the first width is greater than a corresponding shaft width of the central shaft.

7. (Previously presented) The surgical needle according to claim 6 wherein the first width is not less than about 1.5 times the shaft width.

8. (Previously Presented) The surgical needle according to claim 6 wherein the substantially trapezoidal cross-sectional dimension defines a dimension along the x-axis corresponding to a first height of the second needle end, the first height being less than a corresponding shaft height of the central shaft.

9. (Previously presented) The surgical needle according to claim 8 wherein the first height is not greater than about 0.5 times the shaft height.

10. (Previously presented) The surgical needle according to claim 1 wherein the needle body is curved along the longitudinal axis.

11. (Previously presented) The surgical needle according to claim 10 wherein the elongated needle shaft defines an angle of curvature ranging from about 80° to about 180°.

12. (Previously Presented) The surgical needle according to claim 1 wherein the third cutting edge intersects the upper planar surface at an angle ranging from about 15° to about 30° relative to the longitudinal axis.

13. (Previously presented) The surgical needle according to claim 1 wherein the single side surfaces are substantially planar.

14. (Previously Presented) The surgical needle according to claim 1 wherein the second needle end defines a maximum dimension along the z-axis greater than a corresponding maximum dimension along the z-axis of the central shaft.

15. (Previously Presented) A surgical needle, which comprises:

an elongated needle body defining a longitudinal y axis, the elongated needle body including a central shaft and having a first end for attachment to a suture and a second needle end for penetrating tissue, the second needle end including lower and upper opposed surfaces and single side surfaces extending continuously between the lower and upper surfaces and contiguous therewith, the upper surface and side surfaces intersecting to define opposed first and second generally arcuate side cutting edges extending to a pointed tip, the lower surface extending to a third cutting edge defined at the intersection of the side surfaces and proximal of the pointed tip, the third cutting edge extending in oblique relation relative to the longitudinal axis of the needle body to terminate at the pointed tip, the second needle end defining a maximum dimension inclusive of the first and second cutting edges greater than a corresponding maximum dimension of the central shaft, the second needle end having a transition area, a proximal portion of the second needle end disposed proximally of the transition area including a first length having a trapezoidal transverse cross-sectional dimension inclusive of the first and second cutting edges and a distal portion of the second needle end disposed distally of the transition area including a second length having a triangular transverse cross-sectional dimension inclusive of the first and second cutting edges, the first length being longer than the second length, at least a portion of the first length having a diameter that decreases distally towards the needle end, and at least a portion of the first length having a diameter that decreases proximally towards the central shaft of the needle body.

16. (Previously presented) The surgical needle according to claim 15 wherein the side surfaces are each substantially planar.

17. (Previously presented) The surgical needle according to claim 16 wherein the third cutting edge is substantially linear.

18 - 19. (Canceled)

20. (Previously Presented) The surgical needle according to claim 16 wherein the maximum dimension of the second needle end is at least about 1.5 times the maximum dimension of the central shaft.

21. (Previously Presented) The surgical needle of claim 1, wherein the upper surface terminates adjacent the pointed tip and wherein the lower surface terminates proximally of pointed tip.

22. (Previously Presented) The surgical needle of claim 1, wherein the trapezoidal transverse cross-section of the proximal portion of the transition area is defined by having exactly one pair of parallel sides.

23. (Previously Presented) The surgical needle of claim 1, wherein the trapezoidal transverse cross-section includes exactly four sides.

24. (Previously Presented) The surgical needle of claim 1, wherein the triangular transverse cross-section includes exactly three sides.

25. (Previously Presented) The surgical needle of claim 15, wherein the trapezoidal transverse cross-section includes exactly four sides.

26. (Previously Presented) The surgical needle of claim 15, wherein the triangular transverse cross-section includes exactly three sides.